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# A STUDY OF THE EFFECT OF ANGER ON IMMORAL JUDGMENT OF INTERNET PRIVACY INVASION

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## Abstract

*With the emergence of Web 2.0, people are able to share their thoughts and photos with their friends and strangers. Yet, they also risk invasion of their privacy. Information privacy has therefore become an important issue in the information age. In this research, we focus on the influence of anger on immoral judgment of privacy invasion in cyberspace. Specifically, two scenarios, nonviolent and violent-depiction, are designed to investigate the influence of anger on immoral decision making. Our results revealed that the level of anger will increase immoral judgment in nonviolent and violent depiction scenarios, respectively. And the level of anger in violent-depiction scenario is higher than in nonviolent-depiction scenario. The research findings show that college students easily make an immoral judgment in violent situations. In violent depiction scenario, however, high moral obligation group can enhance the effect of ethical self-efficacy for moral judgment.*

*Keyword: moral judgment, immoral judgment, anger, ethical self-efficacy, moral obligation.*

# 1 INTRODUCTION

The recent emergence of Web 2.0 has changed the way how businesses and people use the Internet (O'reilly, 2005). Although people benefit by rapid development of information technology, individual privacy is increasingly threatened on the Internet. Moreover, some netizens become aggressive after reading or watching violent content on the Internet. The incident of 'Dog Poop Girl', for instance, was a famous event of privacy invasion in South Korea, 2005. Embarrassed in public and indelibly marked, the young woman subsequently quitted her university. Therefore, this leads to a research interest in how anger affects people's immoral judgment in Cyberspace.

## 2 LITERATURE REVIEW

### 2.1 Anger and immoral judgment.

Rest (1987) proposed a four-component model for individual ethical decision making and behavior, whereby a moral agent must (1) Recognize the moral issue. (2) Make a moral judgment. (3) Establish moral intent. (4) Engage in moral behavior. The fourth component of Rest's model involves acting on a person's moral intentions, that is, engaging in moral behavior. Emotion refers to the feelings of affection and is affected by different circumstances. Clore and Huntsinger (2007) think emotion refers to affective states with objects, reflecting an underlying appraisal of a particular kind of situation. Berkowitz (1993) thinks that if people are often exposed to violence and sex on TV, the content will affect they perception of violence, attitude, and to enhance its acts of violence. To date, there is so much sexual and violent content in cyberspace. In this study, we investigate if anger evokes immoral judgment. This study established the following hypothesis.

***H1: Anger will increase immoral judgment.***

### 2.2 Ethical self-efficacy

There are numerous studies that have been conducted to research self-efficacy in computer-related use. The construct of computer self-efficacy (CSE) is defined as an individual judgment of one's capability to use a computer (Compeau and Higgins, 1995, p. 192). Along this line, Kuo, Lin, and Hsu (2007) developed ethical self-regulatory efficacy concerning information privacy, which refers to self-confidence for protection, non-distribution, and non-acquisition of information privacy. In this study, ethical self-efficacy is derived from self-regulatory efficacy concerning information privacy, referring to people's perceived confidence towards rejecting temptations to violate other's privacy on the Internet. These theoretical and empirical observations lead to the following hypotheses.

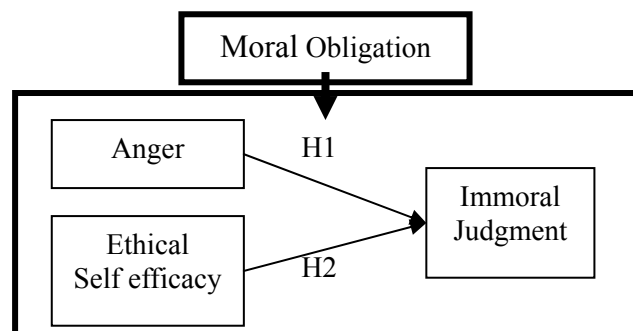
***H2: Ethical self-efficacy will decrease immoral judgment.***

### 2.3 Moral obligation

In the past, many researchers relied on the theory of planned behavior (TPB) for investigating individual ethical decision-making (Gerlach, Kuo, and Lin, 2009). According to Beck and Ajzen (1991), "moral obligation" refers to "personal feelings of responsibility to perform, or refuse to perform, a certain behavior". They also pointed out that it seems likely that a measure of perceived moral obligation could increase predictive power to the TPB model. In this research, we see moral obligation as a regulatory trait, and therefore divide samples into two groups—'high moral obligation group' and 'low moral obligation group' to verify moderator effects of moral obligation.

### 2.4 Research Model and Hypotheses

Summarizing the propositions, this study has proposed the research model as depicted in Figure 1.



### 3 RESEARCH METHOD

#### 3.1 Subjects

The surveys were filled out by the college students in Taiwan. We promised that individual responses would be kept confidential. They were also pledged to entirely anonymity. To avoid two scenarios interfere with each other, we did two stages survey and the two scenarios were randomly in stage I and II. In the stage I, incomplete questionnaires were thrown away, leaving 192 usable responses. A month later, we proceeded to stage II survey, in which we received 171 usable questionnaires. Because each respondent must answer the two questionnaires, we cross-matched stage I and II usable responses, leaving 114 usable responses(response rate: 62.6%).Table1 elaborates the respondents' characteristics.

Variable	Mean	SD	Gender		
Age (year)	19.82	1.63	Male	54	47.4%
Internet Experience(year)	8.14	2.51	Female	60	52.6%

Table 1. Demographic characteristics of the samples (n=114)

#### 3.2 Vignette design (scenario)

When studying issues regarding personal piracy, it is extraordinarily arduous to observe actual behavior. However, it is considerably easier to examine how people reason about hypothetical moral dilemmas than to study their actual moral conduct (Bandura, 1991). Hypothetical moral dilemmas method is therefore employed in this study. Vignettes, by offering realistic scenarios, have the advantage of providing a way to respond to sensitive issues (Harrington, 1996). They have been commonly used in ethics and deterrence research through the sensitive nature of ethical conduct (Bachman et al., 1992). In this study, the subjects were asked to read a short vignette containing an ethically questionable depiction by which a man retaliated against his ex-girlfriend. Next, respondents were requested to make moral judgment toward nonviolent and violent-depiction scenarios, respectively. The following scenarios were adapted from PTT, which is the biggest bulletin board system (BBS) in Taiwan. The text of the vignette read as follows:

*A male user was resentful that his girlfriend make a new boyfriend. Subsequently, he posted an article on the PTT. He also attached the hyperlink which is linked to his girlfriend's web album. Therefore, some users found the girl's private information according to this article and hyperlink. Finally, more and more users participated in discussion about this female.*

Nonviolent-depiction scenario	Violent-depiction scenario
<i>You... I can not believe you dumped me. I have trust you for six years. I heard the voice produced by you and him when I was in the doorway. This has hit my hard. You want me to forgive you. Sorry! I do not love you anymore.</i>	<i>Such a b*tch! F*ck! I can not believe that you, god d*mn b*tch, are a two-timer. I have trust you for six years. I heard your f*cking mo*ns made by him when I was in the doorway. You know... every m*an of you has hit my hard. G*dd*mn*t! You want me to forgive you. F*ck you! I curse you forever.</i>

Table 2. Nonviolent and violent depiction scenarios

#### 3.3 Measurement Items

Four constructs were measured in the study: (1) immoral judgment, (2) anger, (3) ethical self-efficacy, and. These constructs were measured using multiple-item scales in ethical issues, drawn from pre-validated measure items, and reworded for the study of moral judgment. All scale items used 7-point Likert scales. The applicability of the items was trimmed and refined, and dimensions were modified to hold the content validity as understanding of the constructs improved.

##### Measures

*Immoral judgment.* We applied the Multidimensional Scale developed by Reidenbach and Robin (1990) to evaluate individual immoral judgments. In this study, immoral judgments were measured by providing scenarios that place the subjects in a decision-making role. A subject who reads the vignette concerning the privacy issue was to rate the extent to which he or she would not engage in the

behavior using a 3-item question. After reading the vignette, the subject was asked to response those questions. The items are anchored by bi-polar adjectives on a 1 to 7 scale. Sample adjective pairs include “acceptable- unacceptable,” “fair-unfair,” and “just-unjust” for invading other’s privacy.

*Anger.* We used the scales developed by Richins (1997) and Klein et al. (1998) to evaluate the degree of individual anger. After reading the vignette, the respondents were asked to indicate how they are angry about this girl in each of the 7 items (e.g. “I feel angry toward the girl.”, “I will never forgive the girl for betraying her boyfriend.”, and “The female should pay for what she did to the male.”... ).

*Ethical self-efficacy.* According to Kuo, Lin, and Hsu (2007), ethical self-regulatory efficacy refers to self-confidence for protection, non-distribution, and non-acquisition of information privacy. The ethical self-efficacy measure employed by Kuo, Lin, and Hsu (2007) was adapted for this study. This instrument includes five items. (e.g. “not to participate”, “not to search”, “not to share”, “not to discuss”, and “not to invade” the privacy of this girl).

### 3.4 Reliability and Validity

Table 3 reveals the value of Cronbach’s  $\alpha$ , composite reliability (CR), and average variance extracted (AVE) in respective scenarios. First of all, Cronbach’s  $\alpha$  for the entire sample exceeds the minimum acceptable level of 0.70 recommended by Nunnally (1976). Next, all CRs surpass the level of 0.60 recommended by Fornell (1982), confirming the internal consistency of the research constructs’ items. In addition, Fornell and Larcker (1981) recommend that all AVE estimates exceed the 0.50 limit. Therefore, the results support convergent validity. Finally, to ensure discriminant validity, Fornell and Larcker (1981) suggest that discriminant validity can be observed through comparison of the average variance extracted (AVE) of construct pairs to the squared correlation between pairs. The data in this study indicates that the AVE for all construct pairs is well above the squared correlation between constructs, meeting the test of discriminate validity.

nonviolent-depiction scenario						
Construct	Cronbach’s $\alpha$	AVE	CR	Anger	Ethical_SE	Im_Judgment
Anger	0.914	0.658	0.930	<b>0.811</b>		
Ethical_SE	0.872	0.659	0.906	-.153	<b>0.812</b>	
Immoral Judgment	0.926	0.871	0.953	.421**	-.290**	<b>0.933</b>
violent-depiction scenario						
Anger	0.946	0.758	0.956	<b>0.871</b>		
Ethical_SE	0.872	0.652	0.903	-.014	<b>0.807</b>	
Immoral Judgment	0.938	0.889	0.960	.247**	-.262**	<b>0.943</b>
** Correlation is significant at the 0.01 level (2-tailed). * Correlation is significant at the 0.05 level (2-tailed)						

Table 3. Cronbach’s  $\alpha$ , CRs, and AVE

## 4 STUDY RESULTS

### 4.1 Descriptive Statistics

It indicates that in this study, the subjects in the violent-depiction scenario exhibit a higher level of immoral judgment (mean=3.17) than in the nonviolent-depiction scenario (mean=2.58). Next, the angry levels for respondents in the violent-depiction scenario (mean=5.36) are higher than respondents in the nonviolent-depiction scenario (mean=4.45). Table 4 shows the means and standard deviations for the research variables.

Research constructs	Nonviolent-depiction scenario		Violent-depiction scenario	
	Mean	SD	Mean	SD
Anger	4.45	1.15	5.36	1.20
Ethical_SE	4.57	1.47	4.57	1.47
Immoral Judgment	2.58	1.45	3.17	1.46

Table 4. Means and standard deviations of research model

### 4.2 Model Validation

In this study, we appraised the research model by using structural equation modeling (SEM) approach. So we chose Smart PLS 2.0 for this analysis. According as the suggestion by Chin (1998),

bootstrapping with 500 subsamples was performed to test the statistical significance of each path coefficient using the t-test. The structural model result is displayed in Figure 2 and 3.

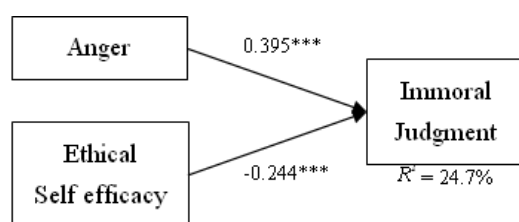


Figure 2. Normal-depiction scenario ( $n = 114$ )

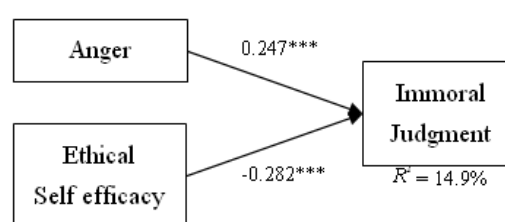


Figure 3. Violent-depiction scenario ( $n = 114$ )

As shown in figure 2, the data structural model in the nonviolent-depiction scenario is statistically significant and explains 24.7% of the variation of immoral judgment, which indicates that both anger and ethical self-efficacy significantly impacts immoral judgment. The coefficient for the path from anger to immoral judgment is 0.395 ( $p < 0.01$ ). Thus, H1 is supported. Next, the coefficient for the path from ethical self-efficacy to immoral judgment is  $-0.244$  ( $p < 0.01$ ), confirming the H2. Moreover, anger plays a more important role than ethical self-efficacy in affecting immoral judgment. As displayed in figure 3, the data structural model in the violent-depiction scenario is statistically significant and explains 14.9% of the variation of immoral judgment, which indicates that both anger and ethical self-efficacy significantly impacts immoral judgment. The coefficient for the path from anger to immoral judgment is 0.247 ( $p < 0.01$ ), supporting H1. Next, the coefficient for the path from ethical self-efficacy to immoral judgment is  $-0.282$  ( $p < 0.01$ ), supporting the H2.

### 4.3 High moral obligation group vs. Low moral obligation group

In order to verify moderator effects of moral obligation, we divided subjects into two groups by median value of moral obligation — ‘high moral obligation group’ and ‘low moral obligation group’.

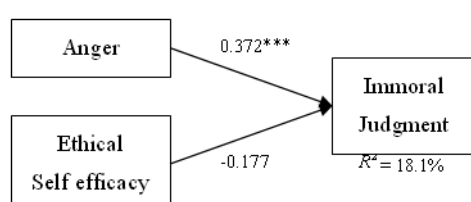


Figure 4. Low moral obligation subjects in the normal-depiction scenario ( $n = 57$ )

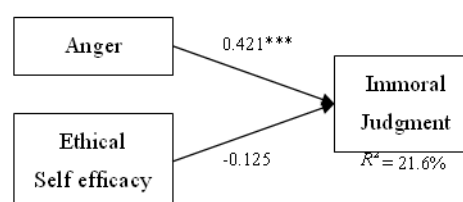


Figure 5. High moral obligation subjects in the normal-depiction scenario ( $n = 57$ )

Figures 4 and 5 depict the structural model result for low and high moral obligation groups in the nonviolent-depiction scenario, respectively. As indicated, for low and high moral obligation group, only the first hypothesis is supported.

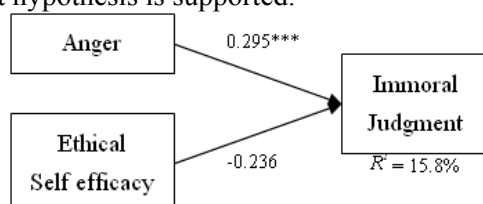


Figure 6. Low moral obligation subjects in the violent-depiction scenario ( $n = 57$ )

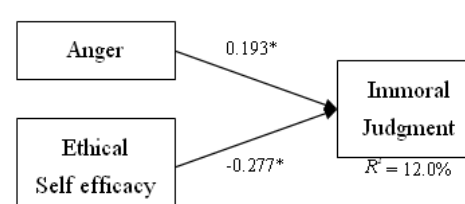


Figure 7. High moral obligation subjects in the violent-depiction scenario ( $n = 57$ )

Figures 6 and 7 depict the structural model result in the violent-depiction scenario. Figures 6 shows only H1 supported, while H1 and H2 are both supported in the high moral obligation group. That is to say, based on the degree of moral obligation in the violent-depiction scenario, there was a difference from ethical self-efficacy to immoral judgment. On the other hand, the influences of anger to immoral judgment in the two groups were both statistically significant.

Scenario	Group	Anger	Ethical_SE	M_Judgment
Nonviolent-depiction	Low moral obligation	4.637	3.975 ***	3.211 ***
Nonviolent-depiction	High moral obligation	4.258	5.168	1.959
Violent-depiction	Low moral obligation	5.429	3.975 ***	3.515 ***
Violent-depiction	High moral obligation	5.296 ***	5.168	2.830
Nonviolent-depiction		4.447	4.572	2.285 ***
Violent-depiction		5.362	4.572	3.173

\*\* Correlation is significant at the 0.01 level (2-tailed). \* Correlation is significant at the 0.05 level (2-tailed)

Table 5. Constructs' mean in different groups

## 5 DISCUSSION

Table 5 shows that the subjects in the violent-depiction scenario demonstrate a higher level of anger (mean = 5.362) than the subjects in the nonviolent-depiction scenario (mean = 4.447). This indicates the emotion of online users is affected by different stimulus. This confirms that if a person is often exposed to violence and sex on TV or on the Internet, the content will affect his or her perception of violence, attitude, and to enhance its acts of violence (Berkowitz, 1993). Also, figure 4, 5, 6, and 7 show that the path coefficient from anger to immoral judgment is statistically significant both for high and low moral obligation groups, indicating anger for immoral judgment is effective for both groups.

In the violent-depiction scenario (see figure 6 and 7), on the one hand, the path coefficient from ethical self-efficacy to immoral judgment is statistically significant only for high moral obligation group. This result implies that based on the degree of moral obligation, there was a difference between groups in influence that ethical self-efficacy has on immoral judgment in the violent-depiction scenario. For information society, we need to strengthen moral obligation to increase the effect of ethical self-efficacy.

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